Applicant : Joseph S. Stam et al.
Appln. No. : 10/783,131
Page : 2

REMARKS

In the Office Action of July 13, 2006, the Examiner indicates, and the Applicant acknowledges, that claims 1-73 are currently pending. The Applicant wishes to express appreciation for the timeliness of the Official Office Action. The Applicant wishes to thank the Examiner for the early indication of allowability of subject matter contained in claims 60-62, 64-67, and 69-73.

Turning to paragraph 3 of the Office Action, the Examiner has rejected claims 1-39 and 42-57 under 35 U.S.C. §112, second paragraph, s being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner continues by stating, "the claims lack sufficient structure for producing the vehicle equipment control signal for each of the possible components listed in the group (claims 1, 14 and 28) whereas claims 36 and 42 do not recite any structures capable of producing the vehicle equipment control signal." As an initial matter, the Applicant respectfully points out that each of the independent claims (claims 1, 14, 28, 36 and 42) incorporates "comprising" in an effort to not exclude additional structure beyond that which is explicitly recited. Additionally, each independent claim recites an imager which is in and of itself capable of producing a vehicle equipment control signal. As described in detail throughout the disclosure there are a host of other components, such as the enhanced transceiver, that are also capable of producing a vehicle equipment control signal. Therefore, it is a complete mischaracterization of the claim language to interpret the wherein clause "as an intended use of the image information" as stated by the Examiner. The Applicant respectfully submits claims 1, 14,

28, 36 and 42 are definite and specifically point our and distinctly claim the subject matter which the Applicant regards as the invention and has explicitly described throughout the disclosure. Therefore, the Applicant requests that the corresponding rejections be withdrawn.

Turning to paragraph 5 of the Office Action the Examiner has further rejected claims 28 and 29 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,008,486, to Stam et al. For at least the reasons expressed above, the Applicant respectfully submits that Stam et al. does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claim 29 depends from claim 28, the Applicant respectfully submits that claims 28 and 29 are in condition for allowance over Stam et al.

Turning to paragraph 6 of the Office Action the Examiner has further rejected claims 14, 16-18, and 20-23 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,806,485, to Jackson Jr. For at least the reasons expressed above, the Applicant respectfully submits that Jackson Jr. does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an image sensor and at least one other component selected from the group comprising: at least one

control output and at least one low voltage differential signal transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 14. In that claims 16-18, 20, 21 and 23 depend from claim 14, the Applicant respectfully submits that claims 14, 16-18, 20, 21 and 23 are in condition for allowance over Jackson Jr.

Turning to paragraph 7 of the Office Action the Examiner has further rejected claims 28-31 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication 2003/0210334, to Sarwari. For at least the reasons expressed above, the Applicant respectfully submits that Sarwari does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claims 29-31 depends from claim 28, the Applicant respectfully submits that claims 28, 29-31 are in condition for allowance over Sarwari.

Turning to paragraph 5 of the Office Action the Examiner has rejected claims 1-13, 15, 19, 24-29, 31-33, 36-49, 54-59 and 68 under 35 U.S.C. §103(a) as being unpatentable over Jackson Jr. in view of U.S. Patent 6,515,271, to Shimizu and U.S. Patent 5,796,094, to Schofield et al. For at least the reasons expressed above, the Applicant respectfully submits that Jackson Jr., Shimizu or Schofield et al., taken

individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: at least one imager comprising at least one image sensor and at least one other component selected from the group comprising: at least one temperature sensor, at least one control output and at least one low voltage differential signal transceiver; at least one enhanced transceiver; and at least one interconnection between said at least one imager and said at least one enhanced transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 1. In that claims 2-13 depend from claim 1, the Applicant respectfully submits that claims 1-13 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 14. In that claims 15, 18, 19 and 24-27 depend from claim 14, the Applicants respectfully submit that claims 15, 18, 19 and 24-27 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image

sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claims 29-33 depend from claim 28, the Applicant respectfully submits that claims 28-33 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: an enhanced transceiver, comprising: at least one low voltage differential signal transceiver and at least one memory formed on a common silicon wafer configured to communicate with an imager, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 36. In that claims 37-39 depend from claim 36, the Applicant respectfully submits that claims 36-39 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an imager board interconnection, comprising: at least one low voltage differential signal transceiver defining at least a portion of the imager board interconnection, wherein the imager board interconnection is configured to operate up to at least one megabaud without emitting unacceptable electromagnetic interference as recited in claim 40. In that claim 41 depends from claim

40, the Applicant respectfully submits that claims 40 and 41 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: an enhanced transceiver comprising at least one low voltage differential signal transceiver and at least one memory configured to communicate with an imager, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 42. In that claims 43-49 and 54-57 depend from claim 42, the Applicant respectfully submits that claims 42-49 and 54-57 are in condition for allowance over the art of record.

The Applicant further submits that Jackson Jr., Shimizu or Schofield et al., taken individually or in combination, do not teach or suggest an automatic vehicle equipment control system, comprising: a vision system, comprising: at least one imager comprising at least one image sensor and at least one low voltage differential signal transceiver formed on a common silicon wafer; at least one processor; and at least one enhanced transceiver interconnected between said at least one imager and said at least one processor, said at least one enhanced transceiver comprising at least one dual port memory as recited in claim 58. In that claims 59 and 68 depend from claim 58, the Applicant respectfully submits that claims 58, 59 and 68 are in condition for allowance over the art of record.

Turning to paragraph 9 of the Office Action, the Applicant respectfully submits for at least the reasons expressed above with regard to claim 58 and in that claims 60-62,

Applicant : Joseph S. Stam et al.
Appln. No. : 10/783,131
Page : 8

64-67 and 69-73 depend from claim 58 that claims 60-62, 64-67 and 69-73 are in condition for allowance.

Turning to paragraph 10 of the Office Action, the Applicant respectfully submits for at least the reasons expressed above with regard to claim 28 and in that claims 34 and 35 depend from claim 28 that claims 34 and 35 are in condition for allowance.

In view of the foregoing remarks, the Applicant respectfully submits that the present application is in condition for allowance over the art of record. The Applicant, therefore, requests that the Examiner issue a notice of allowance. Please contact the undersigned should additional information be required.

Respectfully submitted,
JOSEPH S. STAM ET AL.
By: Gentex Corporation

July 13, 2006
Date

James E. Shultz Jr.
Registration No. 50,511
600 N. Centennial Street
Zeeland, Michigan 49464
616/772-1800